



May 26, 2016

Mr. Richard Corey Executive Officer California Air Resources Board 1001 "I" Street Sacramento, CA 95814

Re: California Air Resources Board Proposed Short-Lived Climate Pollutant Reduction Strategy

Dear Mr. Corey:

Agricultural Council of California (Ag Council) and the California Farm Bureau Federation (Farm Bureau) appreciates the opportunity to submit comments based on the California Air Resources Board's (CARB) Proposed Short-Lived Climate Pollutant (SLCP) Reduction Strategy (Proposed Strategy).

The focus of our comments is the detrimental impact the SLCP Proposed Strategy will impose on California dairy farms when pursuing the methane-reducing technologies that have been identified. We believe that initiating a rulemaking process predicated on unachievable emission targets will lead to significant leakage as dairy production moves out of the state, therefore defeating a major tenet of AB 32. We request that CARB instead support sufficient incentives and research to continue and expand our abilities to reduce SLCPs from dairy farms while preserving the economic and social benefits of a healthy dairy community that can stay in California.

Reducing Methane Emissions

Dairy Manure Targets

It is important to note that no one strategy will work for all dairies. California's dairy industry is considerably diverse, with farm scales, management systems, land types, business structures, and regulatory requirements varying significantly from region to region. State involvement should be designed to benefit dairy operators across many contexts, helping all dairies prepare for the challenges ahead.

The SLCP Proposed Strategy to reduce methane emissions from dairy manure management by at least 20 percent by 2020, 50 percent by 2025, and 75 percent by 2030 is overly ambitious and unrealistic. These reductions would be difficult to achieve under perfect circumstances, let alone under the imperfect situation that

currently exists as it relates to dairy digester development in California. Significant economic and other barriers exist, as identified in the proposed strategy, which have precluded large-scale adoption of dairy methane reduction strategies. The idea that several hundred dairy digesters could be operational by 2025 and possibly over 600 by 2030 is not possible and sets both the state and dairy families up for failure.

Far more research is needed to identify, validate and quantify opportunities for dairy methane reduction, remove economic barriers and obstacles to their implementation as well as understanding the cross-media environmental impacts of these technologies. This same information is needed to chart realistic timeframes for achieving the reductions. We request that CARB revisit these goals to set targets that are more practical and achievable.

Proposed Regulation

The Proposed Strategy states that CARB plans to initiate a rulemaking process to reduce manure methane emissions in 2017 to be in place by 2025. This regulatory approach is irresponsible, and we are strongly opposed to this proposed pathway. CARB should not be setting goals prematurely and should not be discussing potential regulation of dairy methane emissions until the path to those reductions is fully understood. Consideration of regulating the dairy industry for methane emissions at this juncture is reckless and could lead to significant leakage and other unintended consequences, including potential cross-media environmental impacts.

We are particularly concerned about the potential loss of greenhouse gas (GHG) and Low Carbon Fuel Standard (LCFS) credits for the entire sector if dairies are regulated, which would have far-reaching implications for already strained dairy digester economics by eliminating a significant revenue stream. CARB should complete a full and transparent economic and technological evaluation to determine a set of approaches that are effective in achieving reductions before predetermining a regulatory framework that is fraught with inaccurate assumptions.

The state of the dairy industry across California, where dairies get some of the lowest prices in the country for their milk, is already tenuous. In the past decade, about 600 California dairies have shut down — 32 just last year — and more could close this year. And it's not just the milk pricing at issue here. The increasing number of burdensome and costly regulations are taking their toll.

The SLCP Proposed Strategy recognizes the potential for leakage, yet proposes a timeline and regulatory path that will exacerbate the departure of California dairies to other states. The state is not providing the national and world leadership it claims if its policies are simply exporting GHG emissions to other states and countries where emissions will likely increase and exacerbate global warming, while simultaneously driving jobs and valuable agricultural production and processing out of state.

Barriers to Adoption

A number of issues will need to be addressed by CARB, and other sister agencies to facilitate wide-scale adoption and development of dairy methane reduction strategies in California. Specifically, the dairy digester industry in California is still in its infancy and a number of factors have contributed to a low installation rate of methane digesters in California since the Compliance Offset Protocol Livestock Projects took effect in 2011. Digester projects are expensive with high equipment and installation costs. There are conflicting permitting and other regulatory requirements in the state, including air quality standards for Best Available Control Technologies (BACT) and requirements for NOx that have prevented some existing methane digesters from upgrading engines or expanding digesters. The lack of, or difficulty accessing net metering in some areas of the state, as well as with some energy providers, has led to difficulties relating to digesters. In addition, there are variable technological and operational challenges associated with methane digesters.

Programs and opportunities in the state that would facilitate the ability of operators to rely on digesters as a source of compensation from the production of energy are in transition. In geographic areas served by California Public Utilities Commission (CPUC) jurisdictional utilities, the net metering statute will soon operate under a new framework. Although the ability to consolidate multiple accounts to offset the energy generated from a digester can prove effective, the new framework reduces the cost benefits to the customer and it is not clear how effective it will be in the future to rely on net metering for digesters. In areas where publicly owned utilities provide energy service and establish their own net metering frameworks, those utilities are reaching the limits of requirements to offer net metering to customers and - in some instances - have indicated plans to discontinue net metering options.

Without net metering, customers must rely on power purchase agreements. Last fall the CPUC issued a decision implementing a bioenergy feed-in tariff mandated by Senate Bill 1122 (Rubio), Stats. 2012, Ch. 612. It requires California's three large investor-owned electric utilities (IOUs) to procure 250 megawatts of RPS-eligible generation from bioenergy generation facilities including dairy and other agricultural bioenergy, as well as from other sources. However, issues continue to arise regarding the tariff, such as the parameters for interconnection of the facility to the grid. Outside of those territories there are no clear guidelines about the prioritization of bioenergy for procurement or energy. Without clear pathways to underwrite the development of digesters, operators face large, unknown costs.

Extensive financing from the Greenhouse Gas Reduction Fund (GGRF) and other incentive funding is a cornerstone of the SCLP Proposed Strategy. The \$35 million in the Governor's proposed 2016-16 budget from the GGRF and the \$500 million over 5 years proposed by the California Department of Food and Agriculture (CDFA) represents an essential start, but given ongoing legal challenges, auction volatility and uncertainties, reliance on the GGRF cannot be assured. The economic assessment in Chapter VIII and Appendix D portray project lifetime costs that are barely feasible with tenuous incentives, and clearly negative lifetime costs without. There are many flawed

and vague economic assumptions throughout the five dairy methane emission reduction strategies. For instance, Strategy 4 is based on digesters using microturbines to generate electricity. Microturbines are significantly more expensive and have no track record of reliability for use on digesters in California.

We support the development of a financial working group of stakeholders as an imperative initial step. A thorough vetting of the UC Davis (February 2016) and Sustainable Conservation (July 2015) reports that were used for the economic assessment of the five dairy strategies would be a key first task of this group.

Continued Research on Emission Reduction Potential

There still remain many data gaps in our efforts to understand and evaluate potential mitigation measures for SLCPs. More research is needed to fully determine the viability of these strategies in California and assess their associated costs and benefits.

- Adoption of manure "scrape" systems may be an option for some dairies.
 Immediate research is necessary to quantify the GHG reduction potential of moving from flush to scrape systems and potential impacts to water quality and air quality for such conversions. If justified by research, a reduction protocol will need to be approved to facilitate and incentivize adoption. Appropriate incentive funding should also be provided once the cost and benefits are more fully understood.
- Improved separation of manure solids may also provide quantifiable methane reduction. Immediate research to fully understand and estimate that potential will be needed. Furthermore, a reduction protocol should be approved if justified by research.
- Fully monetize the benefits of manure composting and digesting. Fertilizer and amendment products and markets must be developed to realize this potential revenue stream and enhance projects' economics.
- A comprehensive account of the numerous other climate programs and mandates farmers must comply with as part of the larger climate narrative. The agricultural community has made noteworthy progress related to on-farm conservation practices.

Dairy Enteric Targets

Enteric emission reduction targets are also of concern to the dairy sector. The industry has made great strides over the past several decades to improve feeding and breeding to greatly reduce the GHG footprint of each gallon of milk produced in California. As recognized by CARB, California's dairy sector is already highly efficient. Thus further reductions in enteric emissions will be difficult to achieve and will also require significant research.

Conclusion

In closing, we recognize the potential of reducing methane emissions with incentives while continually evaluating cost-effectiveness and feasibility. Unfortunately, the SLCP Proposed Strategy is headed dramatically in the opposite direction and needs significant revision if it is to be a successful effort. Instead of unfounded regulatory mandates, we ask that research be completed and reviewed by key stakeholders to close the numerous information gaps and provide a complete and realistic understanding of the costs, benefits, impacts and feasibility of all recommended methane emission reduction strategies. This is essential for measuring accurate progress in meeting the state's goals as well as coordination between state agencies to avoid regulatory duplication.

We appreciate your consideration and the opportunity to comment. Should you have any questions or need anything further from us, please contact either Rachael O'Brien at (916) 443-4887 / Rachael@agcouncil.org or Cynthia Cory at (916) 446-4647 / ccory@cfbf.com.

Respectfully,

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